ORIGINAL

I 49.89/2:85(15) map B1

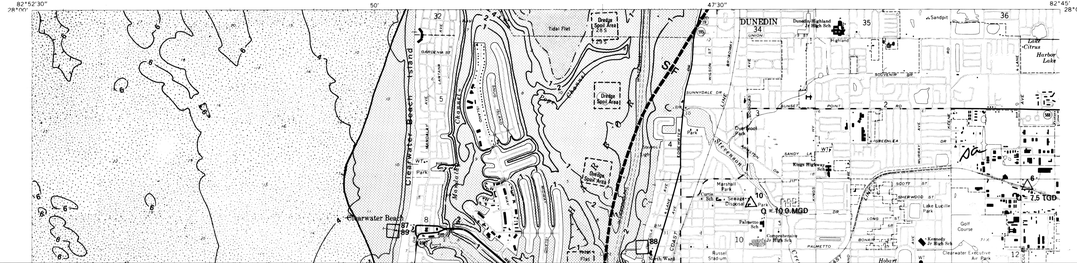
ORIGINAL

I 49.89/2:85(15) map B1

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF FLORIDA

CLEARWATER QUADRANGLE
FLORIDA–PINELLAS CO
7.5 MINUTE SERIES (TOPOGRAPHIC)

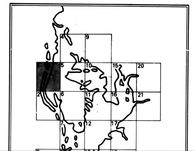


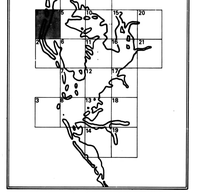
MAP B1

TAMPA BAY ENVIRONMENTAL ATLAS

WATER RESOURCES

CLEARWATER





Scale 1:24,000

1984

TOPICAL MAPS IN THIS ATLAS:
A. BIOLOGICAL RESOURCES
B. WATER RESOURCES

Produced by U.S. Fish and Wildlife Service
Projection and 1,000 meter grid, zone 17: Universal Transverse Mercator
10,000-foot grid ticks based on Florida coordinate system, east and west zones

Overlay material compiled in 1984 from latest available data obtained from Federal, State and Local government agencies and other sources.

1000ft/sec grid ticks based on Florida coordinate system, east and west zones

Overlay material compiled in 1984 from latest available data obtained from Federal, State and Local government agencies and other sources.

There is no map A19 due to a lack of data.

LEGEND

MEAN ANNUAL MID-DEPTH SPECIFIC CONDUCTIVITY ISOPLETH (WATER QUALITY) CONTOUR MAP

Five year mean annual specific conductivity September 1978 - August 1983 (mmhos)

POINT SOURCE DISCHARGES *

Industrial Point Source Discharge. Q is permitted capacity in total gallons per day (tgd) or in millions of gallons per day (mgd).

Municipal Point Source Discharge. Q is permitted capacity in total gallons per day (tgd) or millions of gallons per day (mgd).

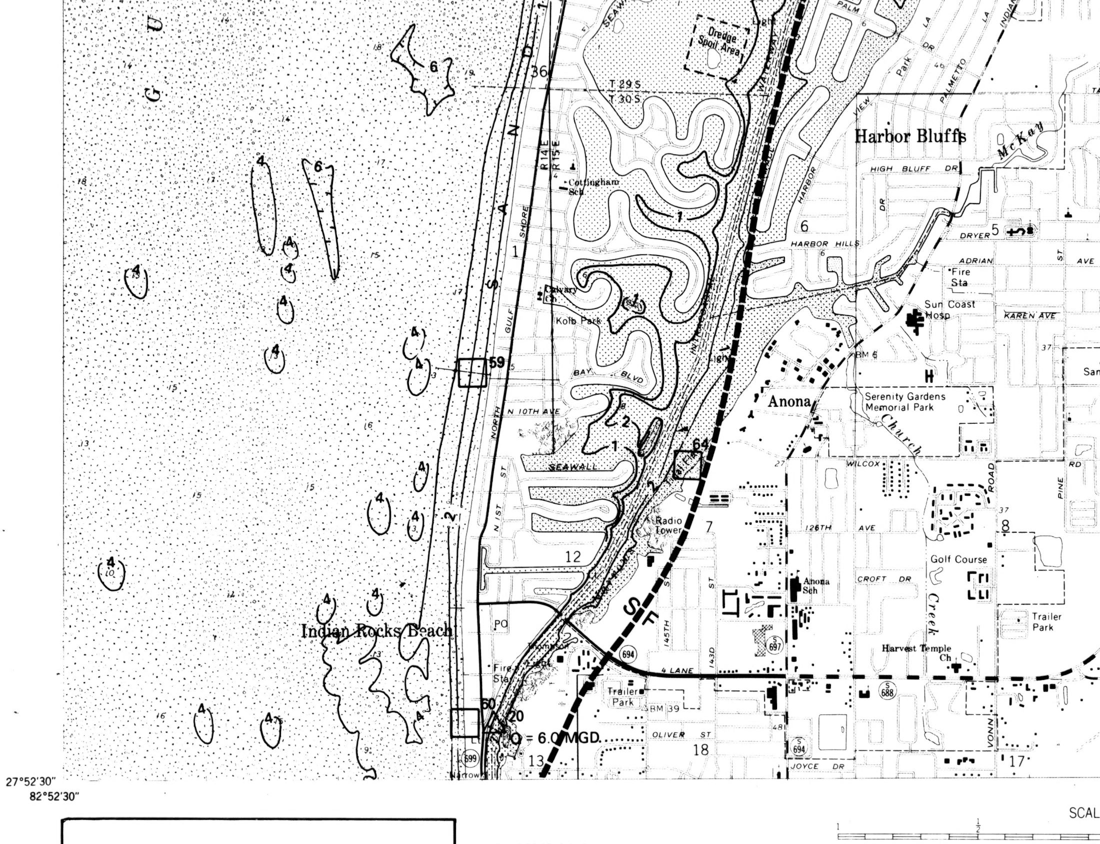
DREDGE SPOIL DISPOSAL SITES

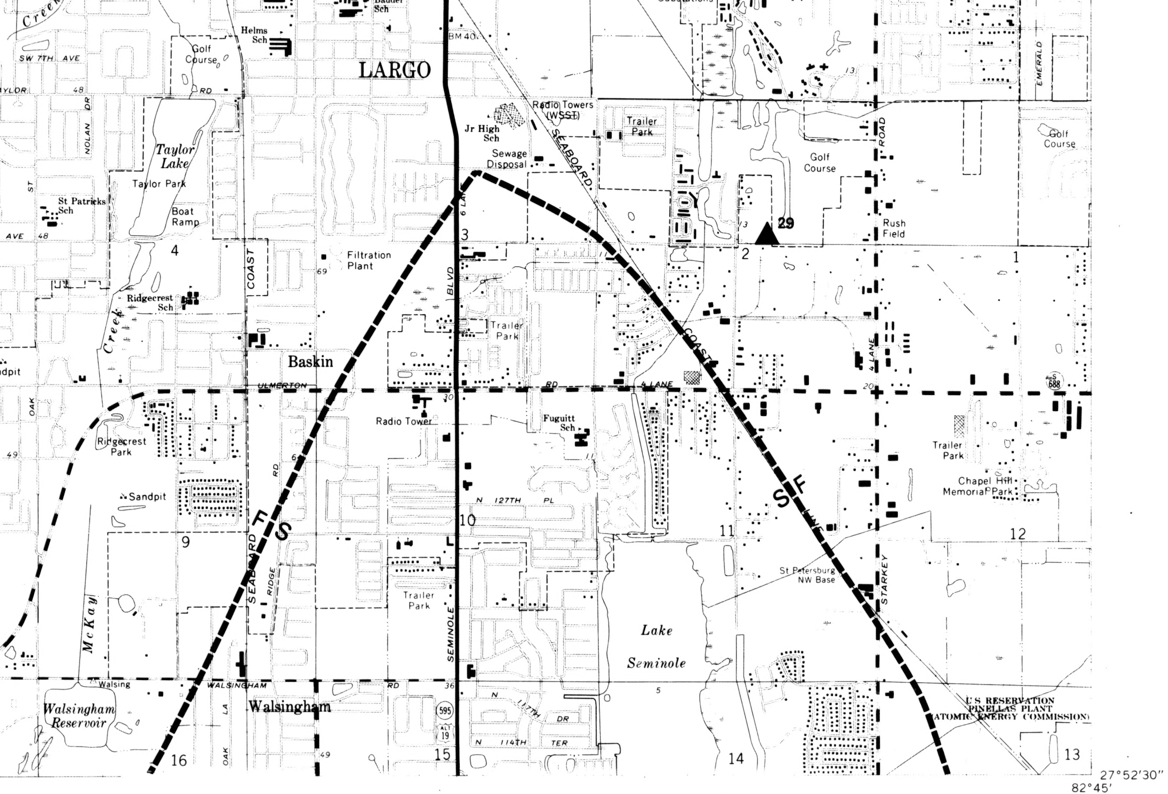
TIDE STATION *
(National Ocean Service)

Active tide station. The tide station number is listed next to the symbol.

Inactive tide station location. The tide station number is listed next to the symbol.

WATER QUALITY SAMPLING STATION *
(Hillsborough County Environmental Protection Commission)
Five year seasonal means, Sept. 1978 - Aug. 1983


G U L F
S A N D
Dredge Spoil Area
Light
WATERWAY
PALM
Park
PALMETTO
LA
DR
INDIAN
VIEW
36
T 29 S
T 30 S
R 14 E
R 15 E
Harbor Bluffs
McKay
HIGH BLUFF DR
HARBOR
DR
Cottingham Sch
HARBOR HILLS
DRYER
ADRIAN
AVE
Fire Sta
Sun Coast Hosp
KAREN AVE
Calvary Ch
Kolb Park
GULF
SHORE
NORTH
INTRACOASTAL
Light
BM 6
BAY BLVD
59
N 10TH AVE
Anona
Serenity Gardens Memorial Park
Church
WILCOX
64
SEAWALL
ST
N 1ST ST
Radio Tower
126TH AVE
ROAD
PINE
RD
12
7
8
Golf Course
CROFT DR
Anona Sch
Creek
Trailer Park
S F
PO
Indian Rocks Beach
145TH
143D
694
697
Harvest Temple Ch
4 LANE
688
Fire Sta
Light
Trailer Park
BM 39
60
20
Q = 6.0 MGD
OLIVER ST
18
JOYCE DR
VONN
17
13
699
Narrows
27°52'30"
82°52'30"
SCALE
1
1/2


Creek
Bauder Sch
Helms Sch
LARGO
BM 40
SW 7TH AVE
Golf Course
YLOR RD
48
NOLAN DR
Taylor Lake
Taylor Park
Boat Ramp
St Patricks Sch
ST
AVE 48
4
COAST
Filtration Plant
69
Ridgecrest Sch
Creek
Baskin
Radio Towers (WSST)
Jr High Sch
Sewage Disposal
SEABOARD
Trailer Park
Golf Course
Golf Course
EMERALD
ROAD
Rush Field
29
13
2
1
3
6 LANE
BLVD
Trailer Park
COAST
4 LANE
ULMERTON RD 4 LANE
20
S 688
30
Radio Tower
Fuguitt Sch
11
Trailer Park
Chapel Hill Memorial Park
S F
LINE
Ridgecrest Park
49
OAK
ndpit
Sandpit
RD
6
F S
SEABOARD
RIDGE
9
10
N 127TH PL
11
12
St Petersburg NW Base
STARKEY
Trailer Park
SEMINOLE
Lake Seminole
McKay
Walsing
WALSINGHAM RD
36
Walsingham
Walsingham Reservoir
595
ALT 19
N 117TH DR
N 114TH TER
5
LA
OAK
49
16
15
14
13
U S RESERVATION PINELLAS PLANT (ATOMIC ENERGY COMMISSION)
27°52'30"
82°45'

E 1:24 000

0 1 MILE

⊡ 10 Active tide station. The tide station number is listed next to the symbol.

☐ 10 Inactive tide station location. The tide station number is listed next to the symbol.

○ 10 WATER QUALITY SAMPLING STATION *

(Hillsborough County Environmental
Protection Commission)
Five year seasonal means, Sept. 1978 - Aug. 1983

—2— BATHYMETRY

The contour interval is 2.0 meters with an initial 1.0 meter supplemental contour line added to better define shoals and inshore tidal flats.

-·-·-·- INTERTIDAL ZONE

This zone demarcates the area exposed and flooded by the tides and occurs between the line and the shore.

GENERALIZED SEDIMENT MAP

░	Sand
░	Shelly Sand
▒	Silty Sand
▓	Clayey Sand
▨	Sandy Clay
▧	Silt

NET TIDAL CURRENT

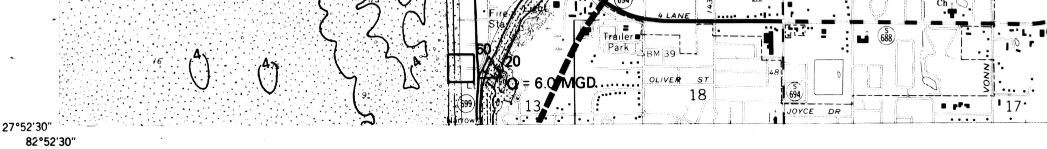
Resultant tidal current. The direction is indicated by the arrow and the discharge range is feet per second

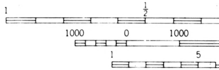
→	0.01 - 0.10 ft/sec
⟶	0.11 - 0.20 ft/sec
——→	0.21 - 0.30 ft/sec
———→	0.31 - 0.50 ft/sec
————→	> 0.50 ft/sec

F ▬▬▬ S FRESHWATER/SALTWATER INTERFACE

(U.S. Geological Survey 1979)
250 mg/l line of equal chloride
concentration in the upper part

MICROCOPY RESOLUTION TEST CHART
NBS - 1010a
(ANSI and ISO TEST CHART No. 2)
1.0
1.1
2.8
4.5
5.0
5.6
6.3


Fire Sta
4 LANE
Trailer Park
BM 39
OLIVER ST
18
Q = 6.0 MGD
60
20
13
694
688
699
48
JOYCE DR
VONN
17
Ch
Narrows
4
6
9
27°52'30"
82°52'30"


1
½
1000
0
1000
1
5

THE TAMPA BAY ENVIRONMENTAL ATLAS WAS PRODUCED BY THE U.S. FISH AND WILDLIFE SERVICE, DIVISION OF BIOLOGICAL SERVICES NATIONAL COASTAL ECOSYSTEMS TEAM (FWS/OBS) FOR COASTAL PLANNERS, DECISION MAKERS AND THE GENERAL PUBLIC, TO DETERMINE AND EVALUATE CHANGE AND TO RESOLVE CONFLICTS AMONG LAND USES, FISH AND WILDLIFE REQUIREMENTS, AND THE MAINTENANCE OF ECOLOGICAL DIVERSITY. THE STUDY AREA INCLUDES A MAJOR PORTION OF THE COASTAL COUNTIES OF PINELLAS, HILLSBOROUGH, MANATEE, AND A SMALL PORTION OF SARASOTA. THERE IS NO ATTEMPT, IN THE DESIGN OR PRODUCTS OF THIS STUDY, TO DEFINE THE LIMITS OF PROPRIETARY JURISDICTION OF ANY FEDERAL, STATE, OR LOCAL GOVERNMENT TO ESTABLISH THE GEOGRAPHICAL SCOPE OF THE REGULATORY PROGRAMS OF GOVERNMENT AGENCIES.

THIS MAP HAS BEEN COMPILED FROM A VARIETY OF SOURCE MATERIALS INCLUDING MAPS, AERIAL PHOTOS, AND REPORTS. SINCE MANY SOURCES CONTAINED GENERALIZED LOCATIONS OF RESOURCES AND OTHER MAPPED FEATURES, THE USER SHOULD NOT RELY ON THESE MAPS FOR PRECISE MEASUREMENTS OF DISTANCES OR AREAS.

PRIMARY SOURCES OF MAPPED INFORMATION

SALINITY: Conductivity for Tampa Bay water quality sampling stations Sept. 1978 - August 1983. Hillsborough County Environmental Protection Commission.

POINT SOURCE DISCHARGES: Computer printout of industrial and municipal point source discharges in West Central Florida. Florida Dept. of Environmental Regulation, 1983.

DREDGE SPOIL DISPOSAL AREAS: Dredge and Spoil easement location maps. Florida Dept. of Natural Resources

N.O.S. TIDE STATIONS: Index of tide stations for the state of Florida. National Ocean Service, Rockville, Md. 1981.

WATER QUALITY: Total chlorophyll, conductivity, turbidity, temperature and total nitrogen data for Tampa Bay water quality stations, Sept. 1978 - August 1983. Hillsborough County Environmental Protection Commission.

BATHYMETRIC: Bathymetric map to St. Petersburg Quadrangle, N.O.S. 1978.

INTERTIDAL ZONE: Nautical Chart #'s 11410, 11413, 11414 and 11425. N.O.S., Rockville, Md. 1983.

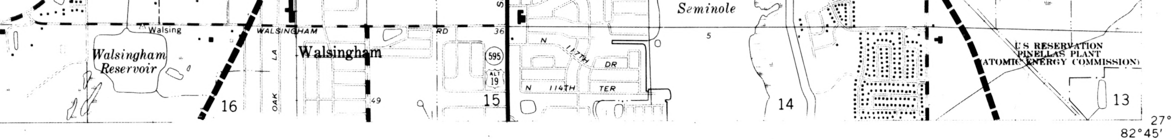
SEDIMENTS: Sediments, oceanographic observations and Floristic data for Tampa Bay, Florida and adjacent waters, 1961-1965, Taylor and Saloman, 1969.

TIDAL CURRENTS: Changes in tidal flow, circulation and flushing caused by dredge and fill in Tampa Bay, Florida. U.S. Geological Survey Open File Report #84-447. Goodwin, 1984.

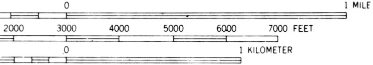
FRESHWATER-SALTWATER INTERFACE: Position of the Freshwater-Saltwater interface in the upper part of the Floridan aquifer, Southwest Florida, 1979. U.S.G.S. water resources open-file report 82-90. Causseaux and Fretwell, 1982.

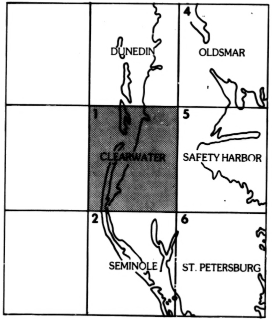
FOR COMPLETE REFERENCE SEE MAP NARRATIVE

Selected areas on this U.S.G.S. base map updated using information extracted from aerial photography. This information not field checked.


Seminole
Walsing
WALSINGHAM
RD
36
Walsingham Reservoir
Walsingham
OAK
LA
N
117TH
DR
N
114TH
TER
595
ALT 19
49
5
16
15
14
13
U S RESERVATION
PINELLAS PLANT
(ATOMIC ENERGY COMMISSION)
27°
82°45′

SCALE 1:24 000


0
1 MILE
2000
3000
4000
5000
6000
7000 FEET
0
1 KILOMETER


DUNEDIN
4
OLDSMAR
1
CLEARWATER
5
SAFETY HARBOR
2
SEMINOLE
6
ST. PETERSBURG

Note: Specific conductivity values on the supplemental legend should be in μmhos.

→ 0.01 - 0.10 ft/sec

→ 0.11 - 0.20 ft/sec

→ 0.21 - 0.30 ft/sec

→ 0.31 - 0.50 ft/sec

→ > 0.50 ft/sec

52'30"

F
▬ ▬ ▬ ▬ ▬
S

FRESHWATER/SALTWATER INTERFACE

(U.S. Geological Survey 1979)
250 mg/l line of equal chloride
concentration in the upper part
of Floridan aquifer.

**Symbols appearing with numbers are described more fully in the narrative*

MICROFILMED FROM
BEST AVAILABLE COPY

MICROCOPY RESOLUTION TEST CHART
NBS - 1010a
(ANSI and ISO TEST CHART No. 2)

1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
4.5
5.0
5.6
6.3
7.1
8.0
9.0
10.0
11.2
12.5
14.0
16.0
18.0
20.0
22.4
25.0
28.0
32.0
36.0